

## Interface LIMIT – CATIA

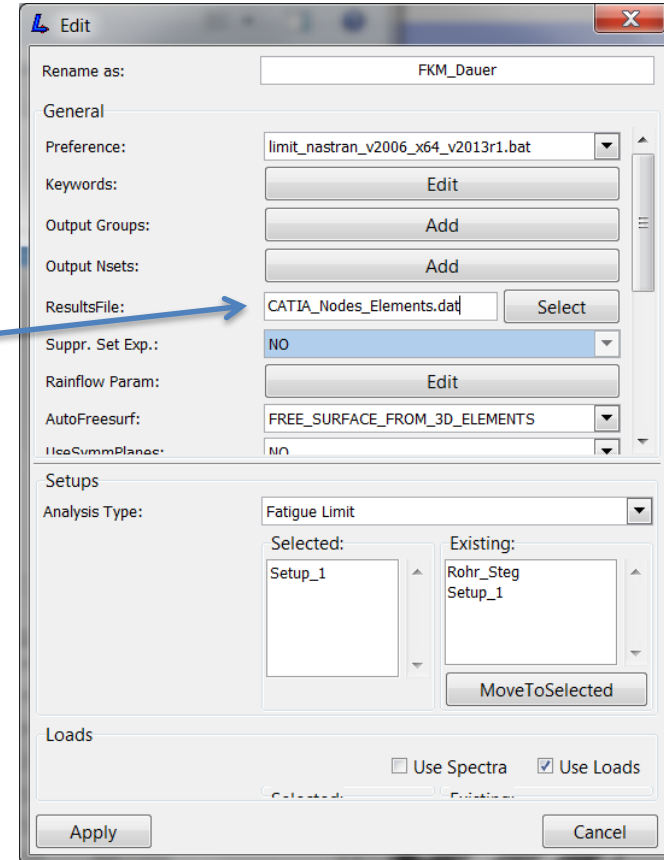
✨ **Import of geometry**

- Import of geometry via text files in Nastran style:

**\*CATIA\_FILE**

**CATIA\_Nodes\_Elements.dat**

- Using LIMIT-GUI / JobManager



### ✦ Import of stress data

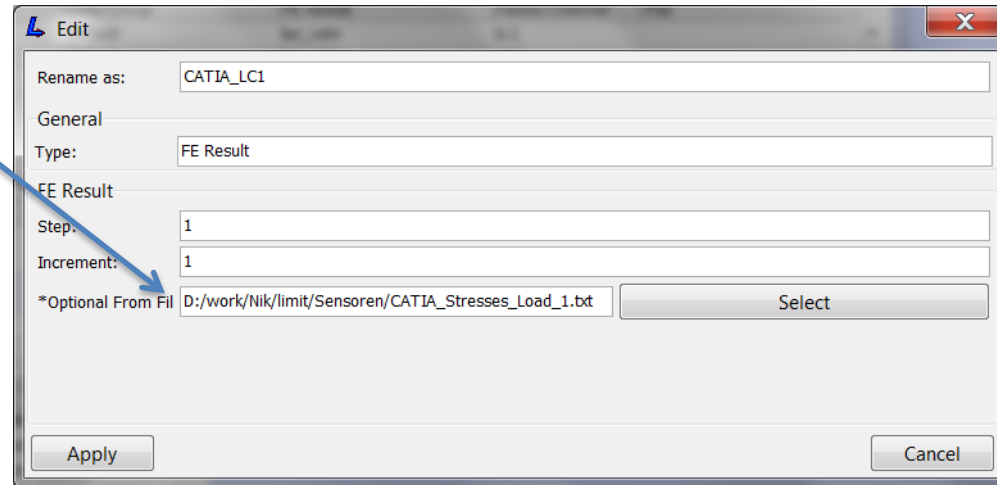
- Import stresses using:

```
*FE_RESULTS, OUTPUT=NO, LOAD_GROUP=Default, FILE=CATIA_Stresses_Load_1.TXT  
Load_1      ,1,
```

- Using LIMIT-GUI / LoadManager/ Create / FE Result:

One file per load case!

Step and Increment = 1



✨ **Stresses are exported from CATIA as principal stresses:**

- File header must look like this:

```
Locations Axis  Global  
Values axis   Local  
x (mm) y (mm) z (mm) C11 (MPa)  C22 (MPa)  C33 (MPa)  ux  uy  uz  vx  vy  vz
```

## Specification of the interface

- ✨ **Maximum nodenumber respectively elementnumber :**
  - Windows 64 bit (x64): 20000000
- ✨ **Maximum number of nodes :**
  - Windows 64 bit (x64): 3000000
- ✨ **Maximum number of elements :**
  - Windows 64 bit (x64): 4000000
- ✨ **These LIMITS can be changed by the user. See document LIMIT\_2017, section: *Redimensioning of Arrays***

**Following elements can be analyzed:**

- ✨ **Solids (stress gradients are only calculated for C3D):**
  - Tetrahedron with 20 Nodes

**Last Slide**